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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,374	07/11/2007	Liam Rowley	DEP5285USPCT	6038

27777 7590 08/18/2009
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EXAMINER

LAWSON, MATTHEW JAMES

ART UNIT	PAPER NUMBER
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3775

MAIL DATE	DELIVERY MODE
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08/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,374	Applicant(s) ROWLEY ET AL.	
	Examiner MATTHEW LAWSON	Art Unit 3775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/14/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4, 12-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 12-29 applicant discloses the statement "and/or" in line 8 of claim 12, it is indefinite as to whether the applicants is claiming a first and second manipulator or if the applicant is claiming a first or second manipulator. For examination purposed the claim has been interpreted as to claiming a first manipulator or a second manipulator.

3. Claim 4 recites the limitation "the axis of rotational adjustment of the guide block" in line 5. There is insufficient antecedent basis for this limitation in the claim.
4. Claim 24 recites the limitation "the teeth" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Objections

5. Claim 1 is objected to because of the following informalities: Line 6 there is a spelling error. The applicant currently claims "...can be adjusted lo rotationally about a". Appropriate correction is required.

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6. Claim 3 is objected to because of the following informalities: The applicant claims "...comprising which an orientation adjuster..." it is unclear what is meant in this statement. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 12-14, 16-22, and 27-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowman et al. (US 4,952,213).

Bowman et al. disclose a device for guiding an instrument in a guiding path when performing an invasive procedure on an extremity of a bone comprising a fixing block (56, figure 1) fixable on the extremity of the bone in a fixing plane; a guiding block (see figure below) mountable on the fixing block substantially in the fixing plane, wherein the guiding block defines the guiding path (see figure below); and a first manipulator (84, figure 1) for manipulating the guiding path rotationally with respect to the fixing block about an axis substantially perpendicular to the fixing plane (column 5, lines 57-65; column 9, lines 4-23) or a second manipulator (92, figure 1) for manipulating the guiding path substantially linearly with respect to the fixing block along an axis substantially in the fixing plane (figure 1,), wherein the first manipulator or second manipulator are manipulable from a position or positions at or near to a transverse end of the device (figure 1), wherein the guiding path is a substantially planar path (figure 1), and further

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comprising a first manipulator (84, figure 1) for manipulating the guiding path rotationally with respect to the fixing block about the axis substantially perpendicular to the fixing plane, the first manipulator being manipulable from a position at or near to a transverse end of the device (figure 1, column 5, lines 57-65, column 9, lines 4-23), and further comprising a second manipulator (92, figure 1) for manipulating the guiding path substantially linearly with respect to the fixing block along an axis substantially in the fixing plane, the second manipulator being manipulable from a position at or near to a transverse end of the device (figure 1). The first manipulator manipulates the guiding path rotationally about the axis of a rotational pivot shaft (66, figure 1), wherein the rotational pivot shaft is pivotally mounted internally in the fixing block (see figure below, column 4, lines 51-67, column 5, lines 1-13). The first manipulator comprises an exterior actuator (168, figure 2) connected to a stem (166, figure 2) with an end portion (178, figure 3) which drives the rotational pivot shaft rotationally, wherein the first manipulator translates rotational manipulation of the exterior actuator into rotational motion of the rotational pivot shaft about its axis column 8, lines 49-67, column 9, lines 1-23). The axis substantially perpendicular to the fixing plane (see figure below) and the axis in the fixing plane intersect (figure 1), wherein the axis substantially perpendicular to the fixing plane and the axis in the fixing plane intersect at an axis of a rotational pivot shaft. The device further comprising a first guide block (see figure below) mountable on the fixing block substantially in the fixing plane, the first guiding block defining a posterior guiding path and a second guiding block (see figure below) mountable on the fixing block substantially in the fixing plane, the second guiding block

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defining an anterior guiding path and the teeth being concave parallel teeth (172, figures 2-3).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-3, 5-6, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman et al. (US 4,952,213) in view of Cohen et al. (US 2002/0161374).

Regarding claims 1-3, 5-6, and 9-11, Bowman et al. disclose an apparatus for guiding a cutting tool in a surgical procedure on a bone which comprises a fixation block (see figure below) which can be fitted on to a bone (figure 1), a guide block (see figure below) which can be fitted on to the fixation block (figure 1), the guide block defining a path for a cutting tool (188, figure 4), wherein the guide block can be translated relative to the fixation block along a translation axis (see figure below) so as to vary the distance between the guide block and the fixation block, and the orientation of the guide block relative to the fixation block can be adjusted to rotationally about a pivot axis (see figure below) which is approximately perpendicular to the translation axis, and a drive assembly (84, figures 1-4) for adjusting the orientation of the guide block rotationally relative to the fixation block about the pivot axis (column 4, lines 64-67, column 5, lines 1-13), wherein the fixation block has a recess (see figure below) formed in it (region

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around the projection of (56, figure 1), the drive assembly includes a mount element (see figure below) located in the recess, the guide block can be fitted on to the mount element, and the mount element can be rotated within the recess to adjust the orientation of the guide block relative to the fixation block about the pivot axis, and further comprising which an orientation adjuster (80, figure 1) that can be manipulated to adjust the rotational orientation of the guide block relative to the fixation block about the pivot axis. The orientation adjust can be manipulated to adjust the rotational orientation of the guide block relative to the fixation block (figure 1). The translation axis and the pivot axis intersect (see figure below), and further comprising a connector pin (58, figure 1) which extends between the fixation block and the guide block. The apparatus further comprising a first adjuster (84, figure 1) for adjusting the orientation of the guide block relative to the fixation block and a second adjuster (92, figure 1) for translating the fixation block relative to the guide block, and the first and second adjusters are located at or towards one end of the fixation block (figure 1) and the guide block (see figure below) has a slot formed therein (188, figure 4) configured to receive the blade of a saw.

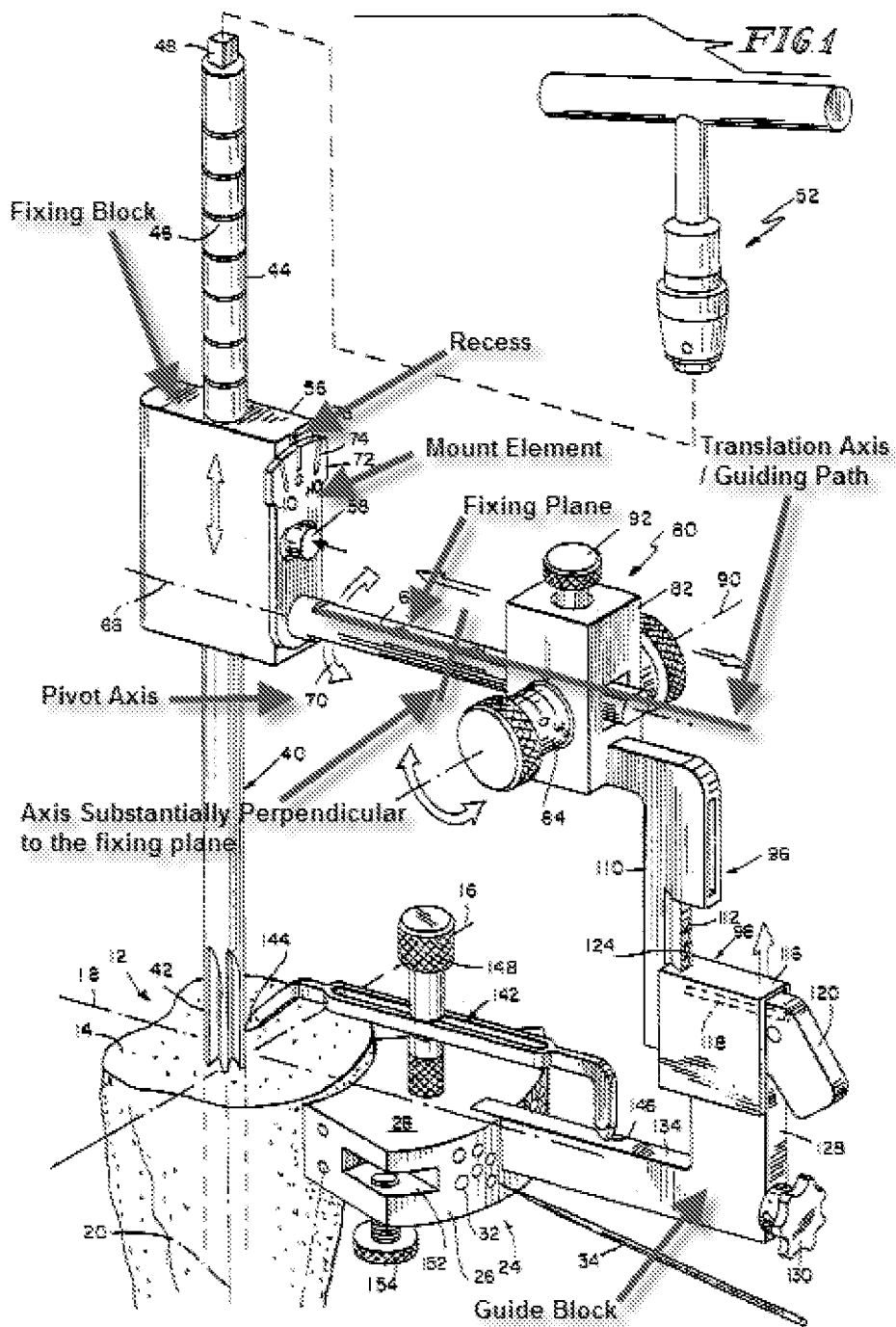
Bowman et al. do not disclose the drive assembly for adjusting the orientation of the guide block being a worm drive assembly.

Bowman et al. discloses the claimed invention except that the drive assembly is a spring locking pin (column 5, lines 59-60) instead of a worm gear. Cohen et al. (US 2002/0161374) shows that a spring locking pin (unidirectional sliding device) is an equivalent structure known in the art. Therefore, because these two drive assemblies

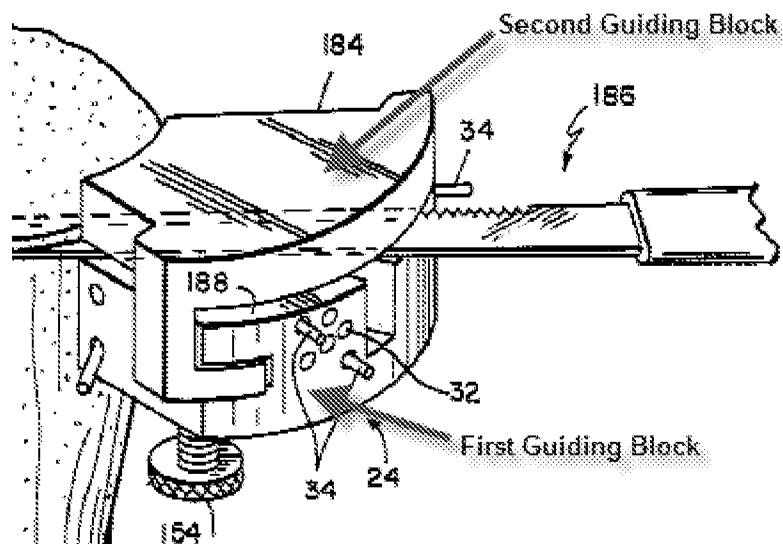
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were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the spring locking pin of Bowman for the worm gear assembly of Cohen.

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11. Claims 4, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman et al. (US 4,952,213) in view of Cohen et al. (US 2002/0161374) in further view of Carson et al. (US 7,547,307).

Bowman et al. in view of Cohen et al. disclose the claimed invention except for the orientation adjuster/connector pin being threaded at one end.

Carson et al. disclose an orientation adjuster/connector pin (68, figures 39a-c) being threaded at one end to permit rotational adjustment of the fixation block by varying the angle of the fixation block (58, figures 39-ac) relative to the guide block (62, figures 39a-c), (column 16, lines 57-67, column 17, lines 1-53). Accordingly it would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the device of Bowman et al. in view of Cohen et al. to have a threaded orientation adjuster/connector pin to permit rotational adjustment of the fixation

bock to vary the angle of the fixation block relative to the guide block.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman et al. (US 4,952,213).

Bowman et al. disclose the claimed invention except for the first and second guiding block having opposite handedness. It would have been an obvious matter of design choice to have the first and second guiding block having opposite handedness, since applicant has not disclosed that having opposite handedness solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the first and second guiding blocks have same handedness.

13. Claims 23-26, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman et al. (US 4,952,213) in view of Carson et al. (US 7,547,307).

Bowman et al. disclose the claimed invention except for the orientation adjuster/connector pin being threaded at one end.

Carson et al. disclose an orientation adjuster/connector pin (68, figures 39a-c) being threaded at one end to permit rotational adjustment of the fixation block by varying the angle of the fixation block (58, figures 39-ac) relative to the guide block (62, figures 39a-c), (column 16, lines 57-67, column 17, lines 1-53).). Accordingly it would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the device of Bowman et al. in view of Cohen et al. to have a threaded orientation adjuster/connector pin to permit rotational adjustment of the fixation

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bock to vary the angle of the fixation block relative to the guide block.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **See attached PTO-892.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW LAWSON whose telephone number is (571)270-7375. The examiner can normally be reached on M-F, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Barrett can be reached on 571-272-4746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. L./
Examiner, Art Unit 3775

/Thomas C. Barrett/
Supervisory Patent Examiner, Art
Unit 3775